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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,435	02/17/2004	Robert D. Kross	K15-007.CIP/K15-017	1559
28156 7590 07/13/2007 COLEMAN SUDOL SAPONE, P.C. 714 COLORADO AVENUE BRIDGE PORT, CT 06605-1601			EXAMINER ISSAC, ROY P	
			ART UNIT 1623	PAPER NUMBER
			MAIL DATE 07/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<p align="center"><b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b></p>	<b>Application No.</b> 10/780,435	<b>Applicant(s)</b> KROSS ET AL.	
	<b>Examiner</b> Roy P. Issac	<b>Art Unit</b> 1623	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 25 June 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
 (b) ☐ They raise the issue of new matter (see NOTE below);  
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).


4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
 5. ☒ Applicant's reply has overcome the following rejection(s): See attachment.  
 6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
 The status of the claim(s) is (or will be) as follows:  
 Claim(s) allowed: None.  
 Claim(s) objected to: None.  
 Claim(s) rejected: 1-20.  
 Claim(s) withdrawn from consideration: None.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: See attachment.  
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_  
 13. ☐ Other: \_\_\_\_\_

  
 S. Anna Jiang, Ph.D.  
 Supervisory Patent Examiner

### **Advisory Action**

The Office Action is in response to Applicant's proposed amendment and response after Final filed on 25 June 2007. The amendments have been considered and will be entered as discuss below.

5. The proposed amendments to claims 12-13 by changing their dependencies from claim 1 to claim 11 will overcome objections to claims 12 and 13.

Applicant's arguments, see Page 4, last paragraph to page 5, first paragraph, filed 25 June 2007, with respect to rejections of claims 1-20 under section 112, first paragraph have been fully considered and are persuasive. The rejections under section 112, first paragraph of 1-20 has been withdrawn.

11. Applicants' arguments with respect to rejection under 35 U.S.C 112 second paragraph were fully considered, but were found unpersuasive and rejections of record are adhered to. The applicants point to the use of phrases such as "the pH of the composition either remains relatively constant or decreases", and "...the amount of nitrite ion in the form of nitrous acid is greater than about 35% but no more than about 95% by weight of the total nitrite ion in the solution" to describe what is meant by the term "stabilized" in the claims herein. However, the two quoted phrases themselves shows the indefiniteness of the term "stabilized." For example, at said 95% ratio, the pH is about 2.0, while ratio at 35% is about 3.6. (Page 8, Table 1 on Arguments submitted 25 June 2007). The pH varies from 3.6 to 2.0, on a logarithmic scale. Applicant

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further points to the exemplification of the term "stabilized". However, exemplification does not provide clear definition. There is no indication in the specification that stability is limited to stability in pH. There are many other parameters such as ionic strength, temperature of the solution, buffer strength etc. that can be considered stabilized. As such, the rejection under section 112 second paragraph is deemed proper and is adhered to.

Applicants' arguments filed 6/25/2007 with respect to this rejection of claims 1-20 under 35 U.S.C. 102(b), of record in the previous Office Action have been fully considered but they are not deemed persuasive to render the claimed invention patentable over the prior art as further discussed below.

Applicants argue that Benjamin et. al. describes alkali metal nitrites while the instant application is directed to metal nitrites. The claims herein recites the broader term "metal nitrite" that encompass the term "alkali metal nitrite". Applicants further argue that there are many compositions in Benjamin et. al. that fall outside the range of 35% to 95% nitric acid/nitrite ratio. However, the claims herein recite "about 95%" and pH value of "around 3.75". Benjamin et. al. discloses pH value of below 4 which is considered to fall in the "around 3.75" range. Applicants argument that Benjamin's solutions will not function as a long term germicide is considered unpersuasive since Benjamin specifically uses the solution to kill E Coli, and as mouthwash. The rejection under 102(b) is considered proper and is adhered to.

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Applicants' arguments filed 6/25/2007 with respect to this rejection of claims 1-20 under 35 U.S.C. 103(a), of record in the previous Office Action have been fully considered but they are not deemed persuasive to render the claimed invention patentable over the prior art as further discussed below.

Applicants argument that pH in buffers only rises rather than decrease is found unpersuasive. Applicants offer no support for their argument. Buffers are by their very nature used to keep pH level relatively stable. Applicants further argue that Xu's nitrite concentration of 0.0033% is far from the 0.01% limit claimed herein. The range of 0.0033% is considered to fall within the "about 0.01%" range claimed herein. Furthermore, it is considered well within the basic capabilities of one of ordinary skill in the art to make adjustments such as nitrite concentrations. It has been held that it is within the skill in the art to select optimal parameters, such as amounts of ingredients, in a composition in order to achieve a beneficial effect. See *In re Boesch*, 205 USPQ 215 (CCPA 1980). In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The rejection under 103(a) was deemed proper and is adhered to.


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roy P. Issac whose telephone number is 571-272-2674. The examiner can normally be reached on 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia Anna Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Roy P. Issac  
Patent Examiner  
Art Unit 1623

  
S. Anna Jiang, Ph.D.  
Supervisory Patent Examiner  
Art Unit 1623